



# SOIL AND WATER Resources

August 2016

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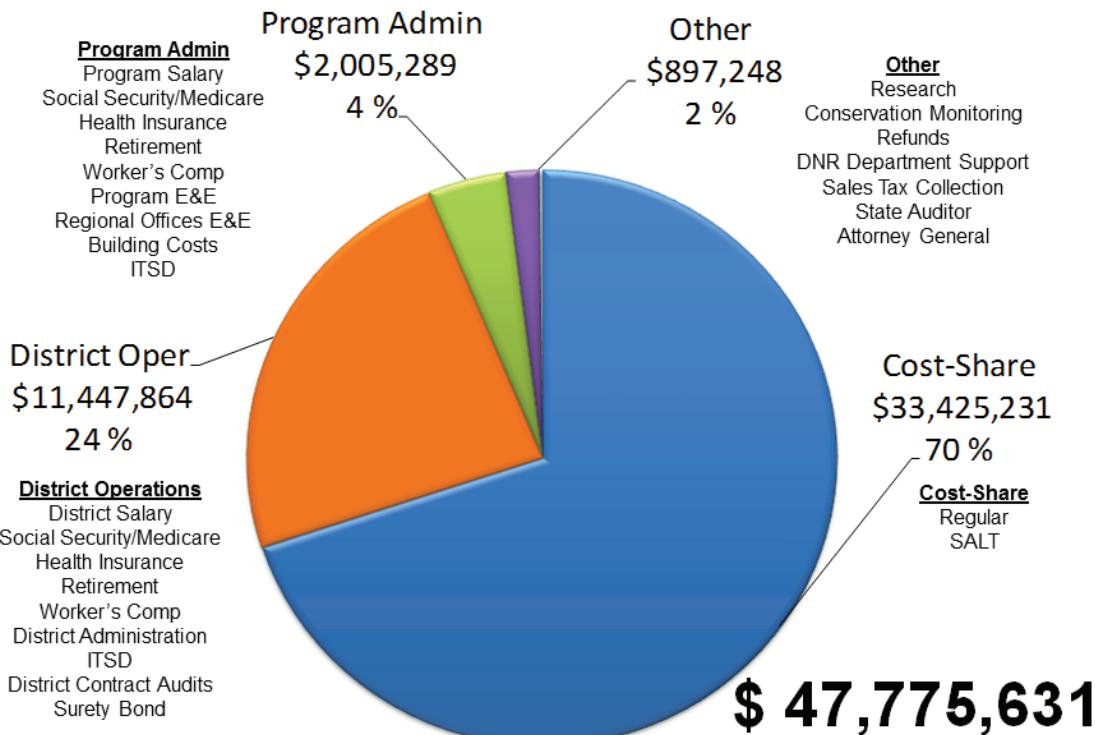
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### Soil and Water Districts Commission Holds August Meeting at the Missouri State Fair in Sedalia

The Missouri Soil and Water Districts Commission held its August 17 meeting at the Missouri State Fair in Sedalia. The commission heard several informational reports.

The commission approved to maintain the state average cost roofing rate as determined by information entered into the cost-share database. The commission reminded districts about the importance of entering costs into the database in order to make an informed decision about setting the rate levels.

Carol Davit, executive director with the Missouri Prairie Foundation gave a report about their organization and the benefits of prairies. She showed how prairie strips can integrate prairie plants within row crop agriculture to curb erosion and provide pollinator habitat. She also pointed out that prairies offer greater rain infiltration and groundwater seepage, greater groundwater flow



The commission heard an update about the fiscal year 2016 Soil and Water Conservation Program expenditures. This chart provided an overview of the the expenditures. Overall, 70 percent of expenditures went to fund farmers implementing voluntary soil and water conservation practices.

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to streams, less surface runoff, which are all good for water quality and quantity. Deep, complex prairie root systems slow, trap, and absorb stormwater. It is possible for as much as 7 inches of rain from one storm to fall on prairie land with no runoff. The Missouri Prairie Foundation owns 3,200 acres in 20 tracts of land in the state for study of pollinators, soils, wildlife, and plants, and provide vital habitat for many plants and animals that can occur nowhere else. At the time of statehood, Missouri had 15 million acres of prairie, but fewer than 70,000 scattered acres of original prairie remain today.

Dr. Randy Miles gave the commission an update about the Soil Health Assessment Center showing the status of soil samples submitted and examples of test results. Read more about the 2016 soil sample analysis in the *Soil Health Assessment Center* article in this issue.

The commission discussed funding for the state water plan and monitoring, supervisor appointments and soil and water conservation district and landowner requests and appeals.

The commission was given final cost-share numbers for fiscal year 2016 with over \$33 million paid directly to landowners. The fiscal year 2017 regular cost-share allocation has approximately \$34 million allocated as of August 10. Approximately \$500,000 or 1 percent was paid out as of August 10. A little over \$3.9 million was allocated in the first supplemental allocation.

Supplemental allocations are scheduled monthly through March. Supplemental allocations are based on the following:

- Districts must have obligated at least 90 percent of their total FY17 allocation in a resource concern.
- An allocation amount of \$60,000 will be provided in each qualifying resource concern.
- Districts may qualify multiple times in a resource concern if they meet the 90 percent obligation eligibility threshold on each of the scheduled dates
- Districts are limited to a \$500,000 maximum of supplemental allocations.

The program will evaluate the process and report the status of the FY17 allocations regularly to the commission. The supplemental allocation process may be suspended at any time based on available funds.

The next commission meeting is scheduled on Oct. 12. The location of the meeting and an agenda will be posted on the commission's webpage at [on.mo.gov/1RR1biP](http://on.mo.gov/1RR1biP).

## Pembroke Hill High School Places 4th at National NCS-Envirothon

A five-member team of all freshmen students from Pembroke Hill High School placed fourth at the National Conservation Foundation (NCF) Envirothon during the awards ceremony at Trent University in Peterborough, Ontario on July 29, 2016.

Fifty-two student teams representing the United States and Canada, plus a guest team from China, put their skills to the test at the world's largest high school-level natural resources education competition. Test stations required the teams to answer a variety of both hands-on and written natural resource questions. Additionally, the students also gave an oral presentation to a panel of judges.

The NCF-Envirothon test teams on their knowledge of soils, aquatic ecology, forestry, wildlife, and a current conservation issue. This year's issue was invasive species. Missouri team members included Maya Chan, Emily Dickey, Coleman Gliddon, Pallavi Jonnalagadda, and Mulan Jiang. Their advisor for Pembroke Hill High School is Kathy Kethum.

When asked about attending the NCF-Envirothon as a first time participant, Pallavi Jonnalagadda had this to say, "This year's Envirothon was an amazing experience. It was a great opportunity to learn about our natural resource areas and their management.

Not only was the Envirothon a great educational experience, but it gave me a chance to work with a wonderful group of teammates. I can't wait for next year!"

Another team member, Coleman Gliddon added, "The program is probably the most engaging and fun way to learn about the environment that I can think of and it has really encouraged me to think holistically about the subject.



**Maya Chan, Emily Dickey, Coleman Gliddon, Pallavi Jonnalagadda, and Mulan Jiang from Pembroke Hill High School took 4th place for Missouri at the 2016 National NCF-Envirothon.**

Envirothon was a great way to meet new people from all over North America that shared my interests, as well as to experience a place I wouldn't ordinarily travel."

This was also a first year for their advisor, Kathy Ketchum, as well. When asked about her experience she responded, "As a novice coach for our school's Envirothon team, I was thoroughly honored to take this wonderful group of freshmen to the North American competition. Although our team learned so much about the environment as they prepared for this year's regional and state competitions, the North American competition really pushed my team to the limit. They learned about similarities and differences between the forests, wildlife, soils, aquatic systems, and invasive species in Canada and the United States, and were given the opportunity to think critically about management practices." In addition she said, "The camaraderie between the competing teams was heartwarming. They applauded each other's efforts and truly represented our school's character values which emphasize respect, scholarship, integrity, and compassion. I loved meeting the coaches and students from every corner of North America and will treasure the memory of this experience forever. We are indeed fortunate to have such a solid framework for this program in Missouri."

The 2017 Envirothon will be hosted in Emmitsburg, Maryland. For more information about NCF-Envirothon visit [www.envirothon.org](http://www.envirothon.org). Additional information regarding the Missouri Envirothon is available at [mo.envirothon.org](http://mo.envirothon.org).

## 2016 NCF-Envirothon Top 5 Teams

Place	High School	City	State/ Province
1st	University of Toronto Schools	Toronto	Ontario
2nd	Penncrest High School	Media	Pennsylvania
3rd	Palisades Charter High School	Pacific Palisades	California
4th	Pembroke Hill High School	Kansas City	Missouri
5th	Venturing Crew 202	Westminster	Maryland

## Soil Health Assessment Center Completes 2016 Soil Health Sample Analysis for Cover Crop Contracts

The University of Missouri's Soil Health Assessment Center (SHAC) has completed the analysis of all soil samples taken for the FY16 cover crop contracts. Since this is a new endeavor for Missouri and there is not a reference database, all of the samples had to be analyzed first to develop a statewide database prior to providing reports to landowners.

The statewide database provides information for SHAC to compare the individual samples against to generate a report for a landowner. SHAC started distributing reports to landowners on Monday, Aug. 1 focusing on the northwest area of the state first. Dr. Randy Miles will be attending some

of the MU research center field days to talk about the reports. Training will be provided to district, NRCS and extension staff on the information in the reports and how to help landowners read the reports. Dr. Miles is working with NRCS to do some training around the state. There is also a possibility of doing a webinar for training on the report. SHAC is planning to distribute an example of the report to district offices.

As far as soil samples for FY17 contracts, SHAC has added a couple of items to the information form that has to be submitted with the samples. First, they would like to have the farmer's name for the field, if there is one, which will help the staff at SHAC make sure they are looking at the correct information if landowners call about samples. Secondly, SHAC would like to know if manure has been applied.

Last year several of the forms were missing information such as the soil mapping unit, which was needed for the analysis. SHAC staff were able to determine the information based on the county but it slowed the process down. To insure that all the information is on the form, the district may want to fill out as much of the form as possible with the landowner when they are signing up for the cover crop practice. At the very least, make sure the soil information for the field is on the form this year.

SHAC staff has provided some clarification in the *Sampling Technique* document. Both of the documents are available on the SHAC website at <https://cafnr.missouri.edu/soil-health>.

A University of Missouri College of Food and Natural Resources news article that gives an overview of what has happened at SHAC over the last year is available at <http://cafnrnews.com/2016/07/a-larger-sample-size>.

In FY16 for the cover crop practice, there was \$2.9 million paid on 1,310 contracts and includes 83,863 acres planted. A thank you goes out to everyone for your hard work to get through this first year of this practice and getting the ground work in place for soil health analysis in Missouri.

## Missouri Show Me Chapter Tours of Jefferson City Research Farms to be Held on Sept. 22

The Missouri Show Me Chapter will sponsor a tour of Lincoln University's research farms on September 22 to learn about the latest research in organic production, composting, aquaculture, and cover cropping from Lincoln's research staff.

Registration for the event is \$20 (to cover lunch and beverage costs). Please register by September 19 to ensure adequate food is available. The Busby Farm is located off of U.S. Highway 54 West at 5124 Goller Road in Jefferson City.

For more information or questions contact Todd Higgins at 573-694-2627.

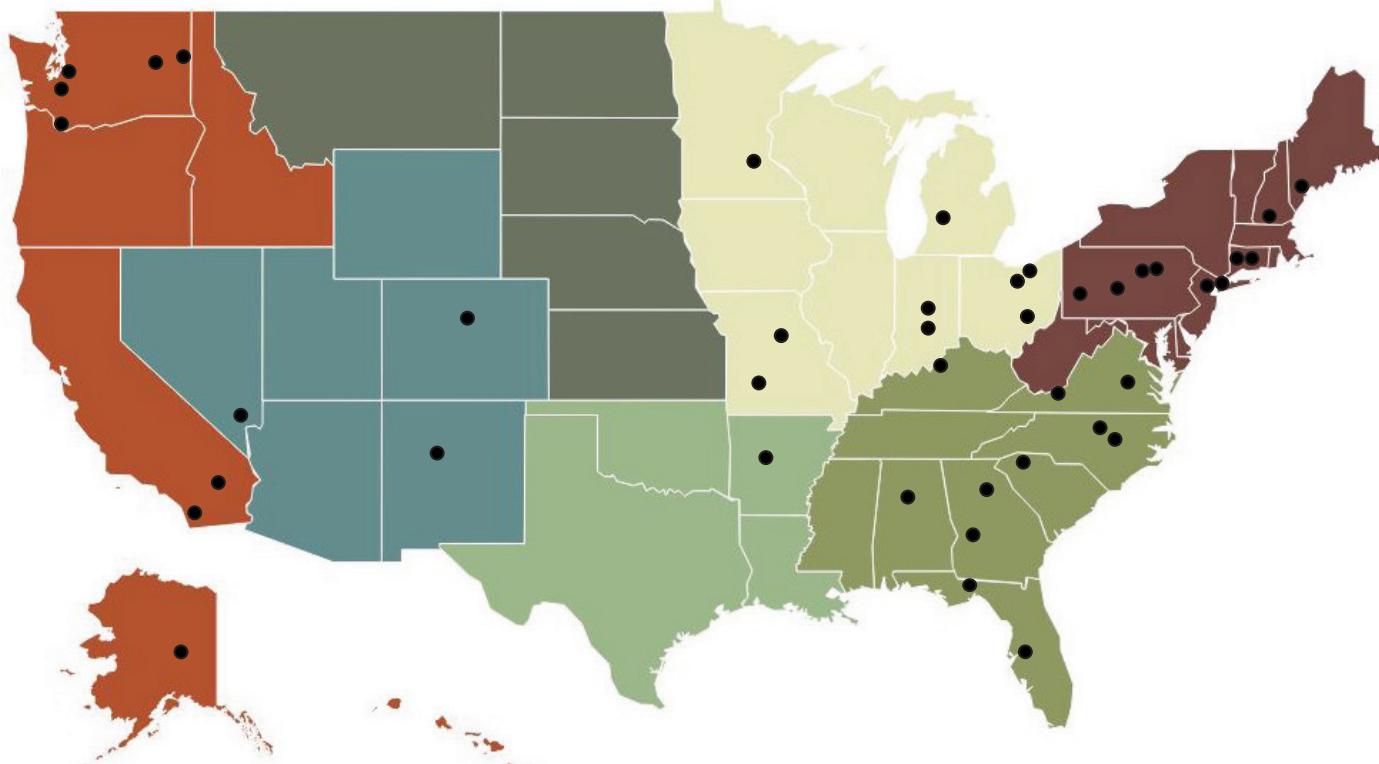
## Boone and Greene County Soil and Water Conservation Districts Receive Grants for Urban Agriculture Conservation from the National Association of Conservation Districts

The National Association of Conservation Districts, (NACD) in partnership with USDA's Natural Resources Conservation Service (NRCS), has awarded \$2 million in grants to 42 conservation districts in 25 states to boost technical assistance capacity for urban agriculture and conservation projects. Both the Boone and Greene County Soil and Water Conservation Districts in Missouri were chosen to receive project grants.

A partnership between NRCS and NACD to provide grants to districts to focus on urban agriculture was announced during the National Association of Conservation Districts meeting in January 2016.

"NACD and the conservation districts we represent work on a scale that no other conservation organization or coalition does," said NACD President Lee McDaniel. "We have the reach we need to engage the 98 percent of folks who don't necessarily produce our fuel, fiber, and food, but still can make a sizable and positive difference on the landscape."

NACD is broadening its base and the base of support for conservation in this country. We are going to reward, support, and encourage conservation implemented on every landscape. The tools they need to better manage stormwater runoff, to reduce nutrient runoff from their flower beds and lawns, to improve water retention and build organic matter in their soils. Don't think for a second that because these practices are being implemented on a quarter acre at a time, that added up across the 98 percent, won't or can't make all the difference in the world."



\$2 million in grants for technical assistance will be awarded to 42 conservation districts across 25 states.

NACD graphic

With support from NRCS, NACD established the Urban Agriculture Conservation Grants Initiative to help conservation districts and their partners provide much needed technical assistance for agricultural conservation where the land is predominately urban or urbanizing. Through this initiative, the partnership is expanding efforts to support agricultural conservation projects in underserved communities and areas known as food deserts.

McDaniel, who is in his second and final year as president of NACD, made the funding announcement alongside Jason Weller, chief of NRCS and longtime champion of voluntary and incentive-based conservation.. "I commend Lee for his leadership and vision, and for emphasizing the importance of urban conservation and urban agriculture," Weller said.

"NACD and NRCS are focused on broadening our reach through more partnerships with communities across the country. Awarding this funding is an important step that NACD, state associations, and individual conservation districts are taking along with NRCS, a step that I'm very proud to support."

The 2016 grants will help urban farmers, community gardens, other local agricultural partnerships implement conservation practices that support local food production, provide opportunities for education and stewardship, and protect natural resources.

A video of the NACD grant announcement is available online at <http://bit.ly/2absohb>.

## 22nd Women in Agriculture Conference to be Held Aug. 29 through 31 in Springfield

The 22nd annual Missouri Women in Agriculture conference will be held from Aug. 29 through 31 at Ramada Oasis Convention Center in Springfield. The registration fee includes workshops including rotational beef and poultry farming, soil health, pest management, electric fencing, and the impacts of weather on agriculture. Tours include the Talbot Conservation Area, Springfield Livestock Marketing Center and Baker Creek Heirloom Seeds. For more information contact mowomeninag@gmail.com.

## Benefits of Missouri's Parks, Soils and Water Sales Tax Featured at the Missouri State Fair



Visitors were able to find out about the benefits to soil and water conservation and state parks provided by the Parks, Soils and Water Sales Tax at the Missouri State Fair held Aug. 11 through 21 in Sedalia. Missouri State Parks is celebrating it's 100th anniversary with many special events now through 2017. The videos showing how Missouri benefits from soil and water conservation and state parks are available online at <http://on.mo.gov/2bEVBkg>.





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